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Specialisation patterns of medical graduates, University of Malawi College of Medicine, Blantyre

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Abstract

Objective: To describe specialization patterns of medical graduates of the University of Malawi College of Medicine.
Design: Cross sectional study.
Subjects: Medical graduates of the University of Malawi College of Medicine.
Setting: University of Malawi College of Medicine.
Main Outcome Measures: Speciality choices, sources of funding for training, employer at time of graduate studies and country where specialist training obtained.
Results: Between 1991 and 2000, 60 (35.5%) of the 169 graduates of the College of Medicine of the University of Malawi have obtained or are in specialist training, 38/60 (63.3%) with training institutions either in the United States or the United Kingdom, 10 (16.7%) had gone to South Africa, 8% Kenya, 5% to the Republic of China (Taiwan) and 3.3% to Uganda. Other countries are; Uganda, Australia and Finland. The preferred specialties were; Public Health 17 (28.8%), Internal Medicine 12 (20%) and Paediatrics 10 (16.7%). Most of the funding was provided by agencies/institutions in the USA and UK. At the time of their training fellowship, 33 (55%) of the candidates were employed by the College of Medicine, 24 (40%) by the public service and the rest, three (5%) by other institutions.
Conclusions: Most Malawian medical graduates are obtaining their specialty training overseas funded mostly by institutions/agencies in the UK and USA. There is need to explore ways on how training could be provided regionally. Malawi and her neighbours must develop post graduate speciality training locally and regionally.

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Introduction

Malawi had no medical school until 1991 when the College of Medicine (COM) of the University of Malawi was established.[1] The country, formerly called Nyasaland had been incorporated into a federation with Northern and Southern Rhodesia (Zambia and Zimbabwe respectively) in 1958. During the Federation, it was agreed that 'natives' of Nyasaland would get medical training at the already existing institution in Salisbury [2] now Harare.

When the Federation was dissolved in 1961, prospects for medical education became limited for Malawians. Malawian medical doctors were then trained in other African countries but most of them headed for the United Kingdom where study fellowships were readily available. However, only a small proportion of those trained in the UK eventually returned, mainly because of poor conditions of service and the difficult political climate at the time.[3] Although Malawi's political environment has improved remarkably, the conditions of service for doctors, especially in the public service is yet to improve.[4]

Malawi's medical training has now come of age after almost 10 years since the inception of the University of Malawi College of Medicine in 1991 with the intention to train Malawian medical doctors who would be responsive to the health care needs and demands of the country.[5] The medical school has produced 169 graduates from 1991 to 2000. Paramedical staff (medical assistants and clinical officers) continue to form the largest group of clinicians as is the situation in many African countries.[6]

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In this article we report specialty choices of medical graduates of the University of Malawi College of Medicine, their specialty training destinations and sources of funding for their training and employer at the time of training fellowship. The possible reasons for the choices made are discussed and the way forward proposed.

Materials and Methods

Career records from the offices of the Registrar and Dean of Undergraduate Studies at the University of Malawi College of Medicine were retrieved and studied. Convenient interviews with 10 medical graduates of the College of Medicine resident in Malawi were conducted to verify the place of employment, choice of specialty, name of employer at time of training, sources of funding and destinations for training specialists and those in training who were medical graduates of the COM.

Results

By the end of 2000, there were 169 medical graduates of the University of Malawi College of Medicine. Twenty (33%) had already specialised while 40 (66.7%) were at various levels of specialist training. At the time of their fellowship, 33 (55.0%) were employed by the COM, 24 (40.0%%) by the public service (Ministry of Health and Population) and three (5.0%) by other institutions. Specialty choices and location of institutions where post graduate training has or is being obtained are presented in Tables I and II. With regard to funding (Table III), only one of the 60 candidates (1.7%) was sponsored by the government of Malawi while 59 (98.3%) were sponsored by donor countries, the World Health Organisation (WHO) and other agencies. Self sponsorship is not yet on record.

Table I: Choice of specialities by graduates of the Malawi College of Medicine

Specialty	Number of Candidates (%)
Public Health	17 (28.3)
Internal Medicine	12 (20.0)
Paediatrics	11 (18.3.7)
Obstetrics and Gynaecology	6 (10.0)
Surgery	4 (6.7)
Opthalmology	4 (6.7)
Other clinical specialties	3 (5.0)
Basic Medical Sciences	3 (5.0)
Total	**60 (100)**

Table II: Study destinations of candidates from Malawi College of Medicine for post graduate training.

Destination	Number of Candidates (%)
United Kingdom	26 (43.3)
United States of America	12 (20.0)
South Africa	10 (16.7)
Kenya	5 (8.3)
Republic of China (Taiwan)	3 (5.0)
Uganda	2 (3.3)
Australia	1 (1.7)
Finland	1 (1.7)
Total	**60 (100%)**

Table III: Sources of funding for graduates of the Malawi College of Medicine for specialist training.

Source of funds	Number of Candidates (%)
British	25 (41.7)
United States	13 (21.7)
World Health Organisation	10 (16.7)
Sight Savers	4 (6.7)
Other	4 (6.7)
Republic of China	3 (5.0)
Malawi Government	1 (1.7)
Total	**60 (100%)**

Discussion

This study shows that many graduates of the COM desire to specialize[7] mostly in Public Health, followed by Paediatrics and Internal Medicine (Table I). The desire to specialise could be due to the fact that remuneration and career progression of the generalist doctor in Malawi is currently poor, unless one goes into private medical practice. Public health specialists however, are better remunerated especially in non-governmental organizations and research institutions. With regard to academic medicine within COM, specialisation is a necessary requisite for promotion, while in public service, a public health qualification accords the candidate better remuneration than clinical disciplines.

Public health teaching constitutes 25% of the curriculum of the COM and is taught right from the first year through to the final year. This deliberate arrangement could be responsible for the majority of graduates choosing public health as they are influenced right through their years of undergraduate training.[8-11] Also donor countries and agencies more readily offer sponsorship for public health study than the clinical disciplines to strengthen primary health care in the country.[12] Availability of training sponsorships could also be responsible for current career choices.

The USA and South Africa are popular destinations for training Malawian doctors at post graduate level (Table II). While graduate training in a developed country affords the candidate the opportunity of being exposed to state-of-the-art procedures and equipment, a candidate from a resource-poor country, upon returning home, may never again perform those sophisticated procedures that require 'high tech' equipment, due to lack of facilities; a situation that invariably leads to frustration. In addition, overseas training in a developed country is also expensive as the money that is used to train one person may be enough to train many if another institution within the region of the developing country is identified for training purposes.

On a personal level, however, an overseas trained person on a fellowship has the advantage of financial rewards because his/her stipend is usually attractive, compared to another candidate trained in the region. The argument is that life is expensive in the developed nations and so approved fellowship stipend is usually more than just to cover the basic necessities.

This study also reveals that the basic medical sciences (BMS) are not popular with graduates of the COM. Possible reasons for the present situation are many and varied. Firstly, donors hardly offer scholarships for BMS studies as the importance of this field towards medical training may be little appreciated by both medical and non-medical persons. Secondly, specialists in the basic sciences almost always take up academic roles at tertiary institutions, with little prospects of work elsewhere, while private practice in diagnostic laboratory medicine by the basic scientists in Malawi is not yet developed.

Although the opportunity for other African medical institutions to host Malawian graduates for specialist training, (while the country develops its own programmes) is huge, one of the limitations is that almost all Malawian graduates rely on donor funds for their training (Table III). The candidate, therefore, does not have a choice regarding the country in which he/she wishes to do the training. Most donors so far (except the WHO and Sight Savers) offer the sponsorship on condition that the training will be carried out in the country where the donor institution is based. The WHO and Sight Savers, however, have encouraged training within the sub-Saharan region for Malawian graduates. Discussions, as a matter of necessity, must be advanced with the donors so that they are flexible enough to allow training of Malawian medical graduates in the region where the spectrum of diseases is similar. Short periods of overseas attachments may then be offered as electives to accord the candidate exposure at an institution in a developed country, if required. If adopted, this practice will ensure the development of relevant capacity building by both the host and the candidate's home institutions.

As it is often difficult for an institution to be adequately staffed and equipped in all areas of post graduate medical training, it is important to identify the strength of each institution with the aim of harnessing these "strengths" for optimum specialist training.

There is, therefore, need to explore how the already existing political and economic links such as the Southern Africa Development Community (SADC), Common Market for Eastern and Southern Africa (COMESA) and the Economic Community of West African States (ECOWAS) can be harnessed for the furtherance of medical education in sub-Saharan Africa. The political and civil instability of many African countries could discourage free-flow of graduate students among countries.

The COM is already working towards establishing post graduate programmes starting with Public Health and then the major clinical disciplines of Internal Medicine, Surgery, Obstetrics and Gynaecology and Paediatrics. This development calls for improvement of the existing human and material resources. While this is desirable, in the end it may not be possible to retain the doctors if the remuneration is not significantly revised upwards and/or adequate private practice allowances are not made. Public service doctors are currently allowed private practice after working hours even though this area is not yet advanced in Malawi.

In conclusion, Malawi needs to take increasing responsibility for the training of its post graduate students cognisant of the fact that there are already protectionist attitudes in Britain against offering training posts to overseas doctors.[13-15] Dependency on donor support is a threat to sustainability of any initiative and as long as specialist training is driven by donor funds, it will be difficult for Malawi to dictate terms. Furthermore, the existing medical institutions in Africa also need to conduct extensive and effective marketing or promotional campaigns so as to attract candidates from Malawi and the rest of the region.

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